

GEORGE VOULGARIS

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Professional Preparation

Department of Geology, University of Patras, Patras, Greece.	Geology	B.Sc. Honors, 1986
Department of Oceanography, University of Southampton, UK	Oceanography	Ph.D., 1992
Woods Hole Oceanographic Institution, MA	Oceanography	Post-Doc. 1995-97

Appointments

1998 - to date Professor. Marine Science Program & Dept. of Earth & Ocean Sciences, University of South Carolina (USC), Columbia, SC (at Professor rank since July 2008)

2000 – 2010 Guest Investigator. Applied Ocean Physics & Eng. Woods Hole Oceanographic Institution, MA.

1999 - present Research Associate. Belle W. Baruch Institute for Marine Biology and Coastal Research, SC.

1999 - 2004 Visiting Fellow. Southampton Oceanography Centre, School of Ocean and Earth Science, UK.

1997- 1998 Senior Research Fellow. Southampton Oceanography Centre, Dept. of Oceanography, University of Southampton, U.K.

1995-1997 Postdoctoral Scholar. Woods Hole Oceanographic Institution, Woods Hole, MA.

1991-1995 Research Fellow. Dept. of Oceanography, The University, Southampton, UK.

Awards

2014 USC Educational Foundation Award for Research in Science. Mathematics and Engineering

Selective Refereed Publications (+ denotes student)

Nelson⁺, T.R. and **G. Voulgaris**, 2014. Temporal and Spatial Evolution of Wave-Induced Ripple Geometry: Regular vs. Irregular Ripples. *Journal of Geophysical Research – Oceans*, 119, doi: 10.1002/2013JC009020.

Warner, C.J., J.H. List, W.C. Schwab, **G. Voulgaris**, B. Armstrong, N. Marshall, 2014. Inner-shelf circulation and sediment dynamics on a series of shoreface connected ridges offshore of Fire Island, NY. *Ocean Dynamics*, 64 (12): 1767-1781.

Nelson⁺, T.R. and **G. Voulgaris**, 2014. A spectral model for estimating temporal and spatial evolution of rippled seabeds. *Ocean Dynamics*, doi/10.1007/s10236-014-0801, p 1-17

Kumar⁺, N., **G. Voulgaris**, J.H. List and J.C. Warner, 2013. Alongshore Momentum Balance Analysis on a Cuspate Foreland. *J. Geoph. Res.*, 118, 5,289-5,295.

Kumar⁺, N., **G. Voulgaris**, J.C. Warner, M. Olabarietta, 2012. Implementation of the vortex force formalism in the Coupled Ocean-Atmosphere-Wave-Sediment Transport (COAWST) modeling system for inner shelf and surf zone applications. *Ocean Modell.*, 47, 65-95.

Kumar⁺, N., **G. Voulgaris**, and J.C. Warner, 2011. Implementation and modification of a three-dimensional radiation stress formulation for surf zone and rip-current applications. *Coastal Eng.*, 58, 1,097-1,117.

- Savidge, D.K., J. Norman, C. Smith, J.A. Amft, T. Moore, C. Edwards, and **G. Voulgaris**, 2010. Shelf edge tide correlated eddies along the southeastern United States, *Geoph. Res. Letters*, 37, L22604, doi:10.1029/2010GL045236
- McCarney-Castle, K., Voulgaris, G. and Kettner, A.J., 2010. Analysis of Fluvial Suspended Sediment Load Contribution through Anthropocene History to the South Atlantic Bight Coastal Zone, U.S.A. *The Journal of Geology*, 118 (4), 399-416
- Sanay, R., A., Yankovsky and **G. Voulgaris**, 2008. Inner shelf circulation patterns under downwelling and stratified Conditions off a curved coastline. *J. Geoph. Res.*, 113, C09006, doi:10.1029/2007JC004487.
- Gutierrez⁺, B.T. , **G. Voulgaris** and P.A. Work, 2006. Cross-shore Variation of Wind-Driven Flows on the Inner Shelf in Long Bay, South Carolina, USA. *J. Geoph. Res.*, 111, C03015, doi:10.1029/2005JC003121.

Current Grants related to the Project

SECOORA/NOAA (13040-FC25): Southeast Coastal Ocean Observing Regional Association (SECOORA): Coordinated Monitoring, Prediction and Assessment to Support Decision-Maker's Needs for Coastal and Ocean Data and Tools. Goal 2: Sustain an Observing Subsystem for the SE. Objective 2.2: Maintain High Frequency Radar (HFR) Operations (year 3). PI: **G. Voulgaris**, Duration: 09/01/2014 – 08/31/2015, Amount \$104,286.

U.S. Geological Survey (USGS)/DOI (13040-FC21). Benthic Boundary Layer Processes and Sediment Transport during Hurricane Sandy on Fire Island, NY. PI. **G. Voulgaris**, Duration: 04/01/2014 – 07/31/2015, Amount: \$124,949.

NSF-OCE (Pending) . Collaborative Research: Alongshelf Flow Convergences in the SAB: The role of Gulf Stream Variability, Coastline Curvature and Wind Forcing. PI: **G. Voulgaris**, Duration: 04/01/2015 – 03/31/2019, Amount: \$521,148.

Synergistic Activities

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| 2013-to date | Advisory Board for Continental Shelf Research. |
| 2012-to date | Advisory Board for the SE Coastal Ocean Observing Research Association (SECOORA). |
| 2012 | External Reviewer of Departments for East Carolina University & University of Athens, Greece. |
| 2007-10 | Associate Editor for Journal of Geophysical Research, Oceans. |
| 2008-to date | Member of Advisory Board on Coastal Processes for SC Sea Grant Consortium. |
| 2000-09 | Science Judge for the NOS Ocean Sciences Bowl. |

Current Graduate Students (total 4 students): D. Cahl (PhD, 2013 – to date); Xiadong Wu (PhD, 2013 – to date); Z. Rahman (PhD, 2014 – to date); C. Ofsthum (PhD. 2014 – to date).

Ex-Graduate Students (total 7 PhD and 7 MS students): T.R. Nelson (PhD, 2013); N. Kumar (PhD, 2013); M. Maza (PhD, 2011); K. McCarney-Castle (PhD, 2010); B. Gutierrez (PhD, 2006); Y.H. Kim (PhD, 2006); G. Healy (PhD, 2005); G. Simmons (MS, 2012); T.R. Nelson (MS, 2011); N. Kumar (MS, 2010); D. Weathers (MS, 2005); W. Baldwin (MS, 2002); P. Slovinsky (MS, 2001); S. Meyers (MS, 2001)

Post-Doctoral Sponsor and Advisor (total 4): T. Mildner (currently), Past.: Sanay (Universidad de Vera Cruz), H. Perales (Universidad de Vera Cruz), Y.P. Wang (Nanjing University)